## SVKM's D. J. Sanghvi College of Engineering

Program: B.Tech in Information Academic Year: 2022 Duration: 3 hours

Technology Date: 11.01.2023

Time: 10:30 am to 01:30 pm

Subject: Design Thinking (Semester VII)

Marks: 75

Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover page of the Answer Book, which is provided for their use.

- (1) This question paper contains two pages.
- (2) All Questions are Compulsory.
- (3) All questions carry equal marks.
- (4) Answer to each new question is to be started on a fresh page.
- (5) Figures in the brackets on the right indicate full marks.
- (6) Assume suitable data wherever required, but justify it.
- (7) Draw the neat labelled diagrams, wherever necessary.

Question No.		Max. Marks
Q1 (a)	You have been accepted at University of Southern California for a MS Program.  Plot your application journey using following swim lanes: Awareness → Research  → Decision → Application → Admission	[10]
Q1 (b)	What are the key aspects of "Mindful Innovation"? Explain with examples <b>OR</b>	[05]
	How are Creativity, Invention, and Innovation different? Explain with examples.	[05]
Q2 (a)	Explain various Stages and Phases in an Innovation Journey. What you need to do to ensure you retain your market leadership after competitor products or services start flourishing in the market where you operate?	[10]
	OR Why do we need to run multiple iterations in the context of Innovation? How Design Thinking helps in planning & designing iterations? Explain with example.	[10]
Q2 (b)	What is the best way to provide/receive feedback on your prototype? Give examples	[05]
Q3 (a)	What is a Journey Map and what are its key components? Explain with illustration.	[05]
	OR What is a persona map? What are the various components of a persona map?	[05]
Q3 (b)	i. How would you define Empathy? What is its significance in Design Thinking? ii. What are the differences between Sympathy and Empathy?	[05] [05]
Q4 (a)	What is "Wizard of Oz" method of Prototyping? Give an example	[05]

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	OR	
	What is a low fidelity prototype, when to generate a low fidelity prototype? Explain with example.	[05]
Q4 (b)	Explain how Netflix uses design thinking to reinvent itself, over and over. Explain in your own words:  i) Key issues that were discovered & addressed through Design Thinking ii) What was unique/innovative about their experience that helped them differ them from their competitors?	[10]
Q5 (a)	What is Crazy-8 method and how this helps rapid brainstorming during Design Thinking ideation phase? Explain with example.  OR	[05]
	What is a Mind Map and how does it help in ideation? Explain with example.	[05]
Q5 (b)	Recently a major Railway over bridge connecting East and West parts of the town, has been pulled down by the authorities for the purpose of redevelopment. This has caused huge and sudden inconveniences for citizens who were caught unaware. As a result, massive traffic jams in all roads in and around the area; refusals of autorickshaws to ply to those areas and up to 70% increase in daily commute time for citizens have become a daily struggle. You are appointed by the authorities to ideate and come up with potential solutions that might ease citizen's lives during this transitioning time (till the main bridge is built and it becomes operational). Explain how you would use "Crazy-8 Brain-writing" method in this context?	[10]

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